

Appl. No. 09/758,675 Reply to Final Office action of December 12, 2003

## **Amendments to the Claims:**

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently amended) A method for activating a microprocessor arranged as a part of a microcontroller, within a framework of a boundary scan test procedure as set forth in IEEE standard 1149 using a JTAG interface of the microprocessor, comprising the step of:

activating the JTAG interface of the microprocessor with a test routine that is executable on the microprocessor; and then transmitted

transmitting a test data stream provided by the test routine to the JTAG interface from the microprocessor;

wherein I/O ports of the microprocessor are connected to pins of the JTAG interface, and a data-in pin of the JTAG interface is activated using the test routine via the I/O ports.

- 2. (Canceled)
- 3. (Previously Presented) The method according to claim 1, further comprising the step of:

performing at least one of a setting operation and a reading operation with respect to the pins of the JTAG interface, the setting operation including inputting a stipulated test sequence in the test routine to the pins of the JTAG interface, and the reading operation including reading a sequence of output values at the pins of the JTAG interface corresponding to the stipulated test sequence in the test routine.

4. (Original) The method according to claim 1, further comprising the step of: causing the test routine to provide a test data stream to the JTAG interface within the framework of the boundary scan test procedure.

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5. (Previously Presented) The method according to claim 1, further comprising the steps of:

switching the I/O ports of the microprocessor to transmit the test routine for a predefined duration to output ports and to high; and

measuring levels present at an interface of the microcontroller.

6. (Previously Presented) The method according to claim 3, further comprising the steps of:

switching the I/O ports of the microprocessor to input ports to enable reception of values from the pins of the JTAG interface generated by the test routine for a predefined duration; and

applying defined values to an interface of the microcontroller to transmit the stipulated test sequence to the microcontroller.

 (Original) The method according to claim 6, further comprising the steps of: reading values present at the pins of the JTAG interface via the I/O ports of the microprocessor; and

storing the values present at the pins of the JTAG interface in a memory area of the microcontroller.

- 8. (Original) The method according to claim 7, further comprising the step of: reading out the values present at the pins of the JTAG interface and stored in the memory area via the interface of the microcontroller.
- (Original) The method according to claim 1, wherein:
  the microcontroller is arranged in a control unit of a motor vehicle.
- 10. (Previously Presented) A microcontroller, comprising: at least one microprocessor capable of being activated, within a framework of a boundary scan test procedure as set forth in IEEE standard 1149 using a JTAG

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interface of the at least one microprocessor, wherein:

the at least one microprocessor is configured to execute a test routine and includes an arrangement for activating the JTAG interface using the test routine, the arrangement including PAD cells of the microprocessor and connecting leads from the PAD cells to data-in and data-out pins of the JTAG interface, the PAD cells including an input/output port function.

- 11. (Canceled)
- 12. (Currently Amended) The microcontroller according to claim 10, wherein: the microcontroller includes an interface to external devices, the interface enabling output levels present at the interface to be measured and enabling input inputs of defined values by an external device.